



# Developing Algebra Sense in the Elementary Years

PROFESSIONAL DEVELOPMENT

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# Take or Tally

Player 1

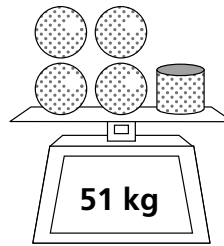
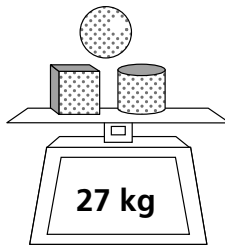
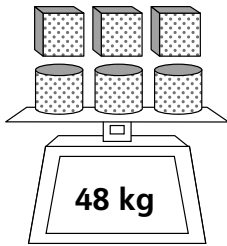
Player 2

$13 - \underline{\quad} = \underline{\quad}$	$13 - \underline{\quad} = \underline{\quad}$
$12 - \underline{\quad} = \underline{\quad}$	$12 - \underline{\quad} = \underline{\quad}$
$11 - \underline{\quad} = \underline{\quad}$	$11 - \underline{\quad} = \underline{\quad}$
$10 - \underline{\quad} = \underline{\quad}$	$10 - \underline{\quad} = \underline{\quad}$
$9 - \underline{\quad} = \underline{\quad}$	$9 - \underline{\quad} = \underline{\quad}$
$8 - \underline{\quad} = \underline{\quad}$	$8 - \underline{\quad} = \underline{\quad}$
Tally	Tally




**Cube A:** 1, 2, 3, 1, 2, 3

**Cube B:** 7, 8, 9, 10, 11, 12

5



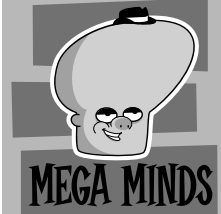
Same shapes are the same number of kilograms.

- a.  = \_\_\_\_ kg
- b.  = \_\_\_\_ kg
- c.  = \_\_\_\_ kg

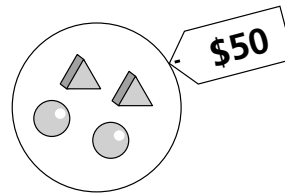
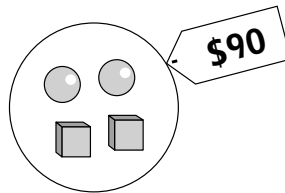
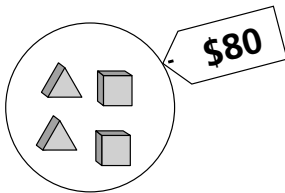
Thinking Mathematically and Problem Solving

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Red Tank



17



Same shapes are the same price.

- a.  \$ \_\_\_\_\_
- b.  \$ \_\_\_\_\_
- c.  \$ \_\_\_\_\_

Thinking Mathematically and Problem Solving

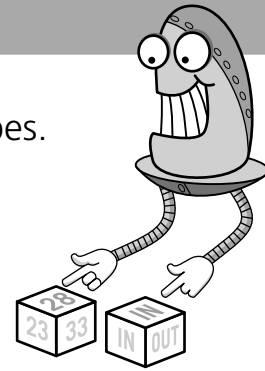
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Blue Tank



Write these numbers and words on the faces of two cubes.

Cube 1 –	23	28	33	37	44	56
Cube 2 –	IN	IN	IN	OUT	OUT	OUT



If you rolled this, you would write 28 in the top row.

Roll both cubes. Write the number from the roll of Cube 1 in the row that matches the roll of Cube 2. Then use the rule to figure out and write the number that should be in the other row.

a.

+15	IN						
	OUT						

b.

-12	IN						
	OUT						

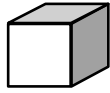
c.

+19	IN						
	OUT						

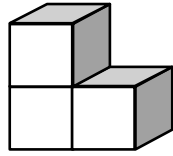
d.

-21	IN						
	OUT						

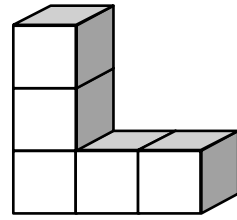




Building 1



Building 2



Building 3



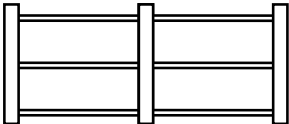
What does the 8th building look like?

How high is the building with 10 blocks along the base?

How many blocks are there altogether in that building?

Which building has a total of \_\_\_\_ blocks?

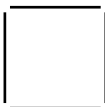


# Relationship patterns

	Number of posts	Number of rails
	1	0
	2	2
	3	4
	4	

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How many rails will be required for 12 posts?

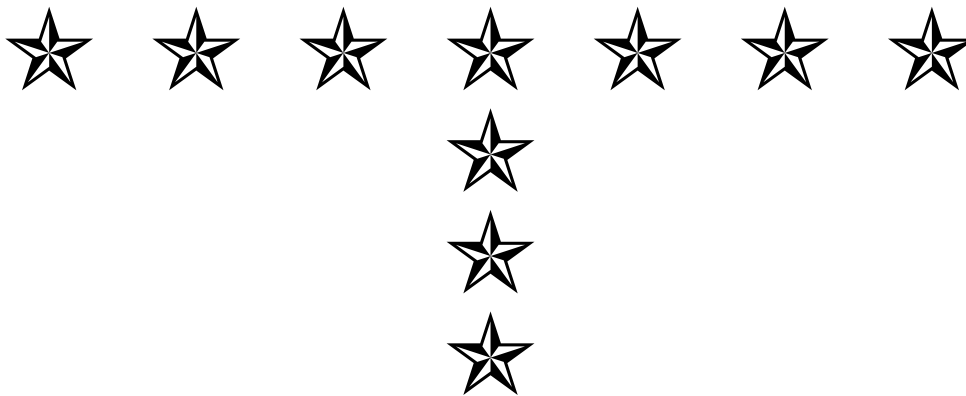
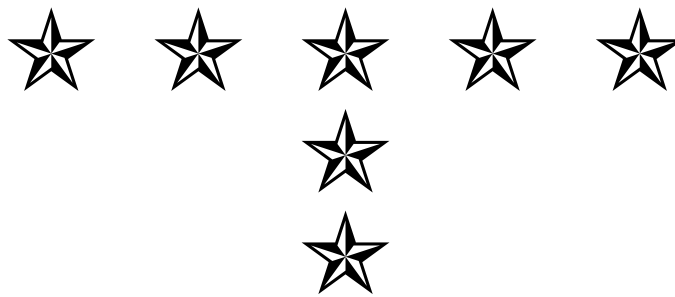
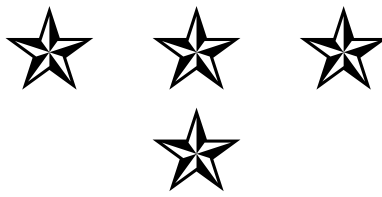
How many rails will be required for 50 posts?

	Number of squares	Number of matches
	1	4
	2	7
	3	
	4	

How many matches will be required to make 10 squares?

How many matches will be required to make 50 squares?

Write in words how to work out the number of matches required to make any number of squares.



How many stars are needed for the 10th “T” shape?